

PATENT APPLICATION
DOCKET NO.: 20661-801D1

Current Pending claims:

Clean copy of Pending Claims as filed in Response to Final Office Action dated December 2, 2002:

1. (Twice amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of and on a layer, wherein said polysilicon resistor is formed using a doping wherein said doping has a concentration of from $\sim 6 \times 10^{19} \text{ cm}^{-3}$ to $\sim [3.75] 1 \times 10^{20} \text{ cm}^{-3}$ and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other; and

wherein said resistor resistance is electronically trimmable.

2. (Twice amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a doping wherein said doping has a concentration of less than $\sim 3.75 \times 10^{20} \text{ cm}^{-3}$ and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other; and

wherein said resistor resistance is electronically trimmable.

11. (Twice amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a doping wherein said doping has a concentration of greater than $\sim 6 \times 10^{19} \text{ cm}^{-3}$ and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other; and

wherein said resistor resistance is electronically trimmable.

12. (Twice amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a late implant doping technique and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other; and

wherein said resistor resistance is electronically trimmable.